

ABSTRACT

ACTIVE MATRIX LIQUID CRYSTAL DISPLAY DEVICE

5 An active matrix liquid crystal display device has an array of picture elements (12), each comprising a picture element electrode (14) and a switching device (16), addressed by crossing sets of selection (row) and data (column) address conductors (18,20), and a set of supplementary connection lines (30) extending in the direction of the data address conductors (20) and
10 connected to respective ones of the row address conductors (18) enabling addressing of the array from one side or opposed sides. Each picture element includes a storage capacitor (22) connected to its picture element electrode and a capacitor line (40) shared by picture elements in the same row. The selection conductor of one row of picture elements is coupled to a respective
15 capacitor line associated with a different row, for example via a connection line (45) at their ends, whereby each connection line is connected to a respective selection conductor for the row of picture elements and the capacitor line for another row coupled thereto. In addition to enabling unwanted display artefacts caused by spurious parasitic capacitances to be avoided, the
20 arrangement also allows capacitively coupled drive schemes to be employed with the necessary drive signals being supplied through the connection lines.

(Figure 3).